

GEOGRAPHIC VARIATION IN THE WHITE-MANTLED
BARBET (*CAPITO HYPOLEUCUS*) OF COLOMBIA
(AVES: CAPITONIDAE)

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Abstract.—*Capito hypoleucus*, a Colombian endemic currently considered monotypic, is divisible into three subspecies that differ in coloration. The nominate race is restricted to the foothills and lower slopes of the northern end of the central Andes from Valdivia, Antioquia, east to the eastern slope of the Serranía de San Lucas, Bolívar. Populations from the valley of the upper Río Porce (*C. h. carrikeri* n. subsp.) and the middle Magdalena Valley (*C. h. extinctus* n. subsp.) are described as new. Deforestation is responsible for the presumed extinction of *C. h. extinctus*.

The White-mantled Barbet (*Capito hypoleucus*), a poorly-known Colombian endemic, is restricted to humid foothill forest (200–1500 m elevation) from the east bank of the lower Río Cauca, east around the northern end of the central Andes, and south to the middle Magdalena Valley (Hilty and Brown, in press). The species was known from fewer than a dozen specimens until Melbourne A. Carriker, Jr. and assistants (1947–1952) collected a series of 22 skins from four localities (Fig. 1) spanning the geographic range of the species. Examination of these specimens, now deposited in the National Museum of Natural History, Smithsonian Institution (USNM), indicates that *C. hypoleucus*, currently considered to be monotypic (Peters 1948), is divisible into three taxonomically distinct populations.

Capito hypoleucus hypoleucus (Salvin)

Capito hypoleucus Salvin, 1897:xvi. Valdivia (3800 ft.), Antioquia, Colombia.

Characters.—The sides of the throat are lightly tinted with brown of the same color as that of the pectoral band. Dorsally, yellow pigment is restricted to the mantle. The flanks and belly are lightly washed with pale yellow.

Distribution.—Foothills and lower slopes at the northern end of the Central Andes from Valdivia, Antioquia, east to the east slope of the Serranía de San Lucas (Volador), Bolívar.

Specimens examined.—Antioquia: Puerto Valdivia (1 ♀, AMNH); Valdivia (3 ♂♂, 1 ♀, USNM); La Frijolera (1 ♂, AMNH).—Bolívar: Volador (2 ♂♂, 3 ♀♀, USNM).

Remarks.—The flanks of birds from Volador tend to be more intensely yellow than those of specimens from the west slopes of the Central Andes in Antioquia, but there appear to be no other significant plumage differences between the two populations. Specimens taken in the Valdivia region more than 40 years apart do not differ noticeably in plumage color. There is little difference in size among any of the populations examined.

Carriker and an assistant collected along the road above Puerto Valdivia from 19 May to 19 June 1948. The four USNM specimens (401684–687) were collected on 25 May, in “badly cut over” forest on steep slopes below the road (Carriker’s field journal deposited in USNM). One male had enlarged testes.

Carriker collected at Volador from 5 May to 1 June 1947; the five *C. hypoleucus*

(USNM 392443–447) were taken on 19–31 May (♂, 23 May, testes enlarged).

Capito hypoleucus carrikeri,
new subspecies

Holotype.—USNM 425942, adult male from Botero, Antioquia, Colombia, elevation 3600 ft (1098 m). Collected 31 Aug 1950 by M. A. Carriker, Jr.; original number 18918.

Characters.—Yellow pigments in *carrikeri* are more extensive throughout the non-black portions of plumage than in *hypoleucus*. The yellow of the mantle extends up the nape to the rear of the crown, as opposed to being restricted to the mantle as in *hypoleucus*. Ventrally, the yellow of flanks, belly, and breast below the pectoral band is brighter and much more extensively distributed. The throat is white with a faint yellow tint, lacking the brown tint found in *hypoleucus*. The brown pectoral band is slightly lighter in shade than in *hypoleucus*.

Measurements of holotype (mm).—Wing chord, 88.2; tail, 57.7; exposed culmen, 24.2; width lower mandible, 13.7.

Distribution.—Known so far only from the type locality.

Specimens examined.—Antioquia: Botero (3 ♂♂, 6 ♀♀, USNM).

Etymology.—Named for Melbourne A. Carriker, Jr., who was responsible for collecting and preparing the type series.

Remarks.—This population is apparently restricted to the drainage of the northward flowing Río Porce, a tributary of the Río Nechí. Slopes above 1500 m elevation, deforestation, and semiarid habitat around the periphery of the valley form barriers to the east, west and south. Contact with *hypoleucus* may have occurred in the past at the foot of the steep valley formed by the Río Porce.

Carriker worked at Botero, a small village on the west bank of the Río Porce on the rail line to Medellín, from 17 August to 9 September 1950. Specimens of *C. hypoleu-*

cus (USNM 425934–942) were collected on 30 August–8 September, from a “tall tree with small fruit” and “from large clumps of mistletoe in large tree,” in the patchwork of forest and pasture on the west bank of the river. Three females and one male had enlarged gonads; a single bird of each sex was in an immature plumage, which lacks the brown pectoral band.

Capito hypoleucus extinctus,
new subspecies

Holotype.—USNM 436335, adult male from Hacienda Sofia, Río Samaná, Caldas, Colombia, elevation 3750 ft (1143 m). Collected 21 May 1951 by M. A. Carriker, Jr., original number 20235.

Characters.—Feather tips on the mantle and nape are white with a faint buffy tint, not strongly yellow as in *hypoleucus* (mantle) or *carrikeri* (mantle and nape). Yellow on the flanks and lower belly is much reduced. The pectoral band tends to be darker brown than in *hypoleucus* and much more so than in *carrikeri*. The throat is similar to *hypoleucus*.

Measurements of holotype (mm).—Wing chord, 89.0; tail, 58.0; exposed culmen, 23.5; width lower mandible, 14.0.

Distribution.—Foothills on both sides of the valley of the Río Magdalena in the vicinity of Honda.

Specimens examined.—Tolima: within 20 miles (west) of Honda (2 ♂♂, 1 ♀, AMNH).—Cundinamarca: Carmen de Yacopí (1 ♀, AMNH).—Caldas: Hacienda Sofia (2 ♂♂, 2 ♀♀, USNM).

Etymology.—Latin, *extinctus*, dead or destroyed, in reference to the probable extinction of this taxon through deforestation of the middle Magdalena Valley.

Remarks.—The series of specimens from the east bank of the Río Magdalena are inadequate to determine if populations east (Carmen de Yacopí) and west (Hacienda Sofia, west of Honda) of the Río Magdalena are subspecifically different.

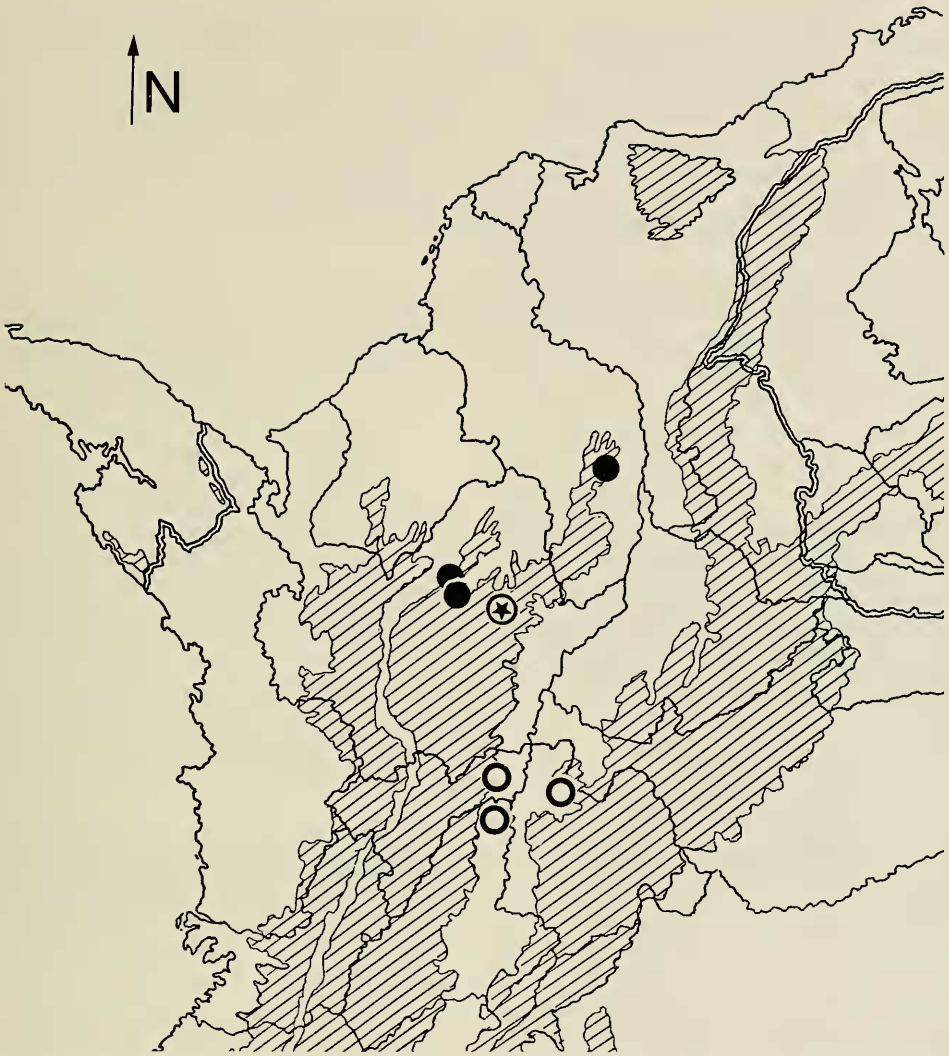


Fig. 1. Map showing the distribution of *Capito hypoleucus* in northwestern South America. Specimen localities are identified with symbols (filled circles = *C. h. hypoleucus*; starred circle = *C. h. carrikeri*; empty circles = *C. h. extinctus*). Fine lines indicate provincial boundaries; cross-hatched areas indicate elevations above 1000 m.

Carriker worked at Hacienda Sofia, along the road to Sonsón, from 10 May to 1 June 1951. Four specimens of *C. hypoleucus* (USNM 436334–337) were collected, two of which had enlarged gonads (♂, 31 May; ♀ 29 May). Carriker’s only direct mention of *C. hypoleucus* from this locale was of an individual taken from a mixed-species flock.

Discussion

The middle and lower Magdalena and Cauca valleys have been heavily deforested since the 19th century and perhaps as far back as Pre-Columbian times (see Chapman 1917, Hilty 1985). Hilty (1985) estimated that *Capito hypoleucus*, as well as a

number of other species inhabiting humid forest on lower Andean slopes, have undergone a historic range loss of more than 50% due to habitat destruction. Before the era of habitat destruction by humans, populations of *C. hypoleucus* were probably in genetic contact, and geographic variation in plumage may have been more or less clinal in nature. The question of whether the recognized subspecies are arbitrary subdivisions of an unperceived cline or discrete populations, in all probability can no longer be answered. There are no data available on the present status or distribution of any of the historically known populations, but the fragmented state of the remaining lower montane humid forest suggests that any remaining populations are insular and genetically isolated. The complete deforestation of the floodplain and foothills of the middle Magdalena Valley during the past 30 years suggests that *C. h. extinctus* may already be extinct.

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